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RAW SEQUENCE LISTING DATE: 06/08/2000
 PATENT APPLICATION: US/09/580,201 TIME: 13:50:11

Input Set : A:\2314-187.app
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3 <110> APPLICANT: McIntosh, J. Michael
 4 Olivera, Baldomero M.
 5 Cruz, Lourdes J.
 6 Corpuz, Gloria P.
 7 Jones, Robert M.
 8 Garrett, James E.
 10 <120> TITLE OF INVENTION: Conotoxin Peptides
 12 <130> FILE REFERENCE: Conotoxin Peptides
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/580,201
 C--> 15 <141> CURRENT FILING DATE: 2000-05-26
 17 <150> PRIOR APPLICATION NUMBER: US 60/173,298
 18 <151> PRIOR FILING DATE: 1999-12-28
 20 <150> PRIOR APPLICATION NUMBER: US 60/118,381
 21 <151> PRIOR FILING DATE: 1999-01-29
 23 <150> PRIOR APPLICATION NUMBER: US 09/493,143
 24 <151> PRIOR FILING DATE: 2000-01-28
 26 <160> NUMBER OF SEQ ID NOS: 20
 28 <170> SOFTWARE: PatentIn Ver. 2.0
 30 <210> SEQ ID NO: 1
 31 <211> LENGTH: 14
 32 <212> TYPE: PRT
 33 <213> ORGANISM: Artificial Sequence
 35 <220> FEATURE:
 36 <223> OTHER INFORMATION: Description of Artificial Sequence:generic
 37 conotoxin peptide sequence
 39 <220> FEATURE:
 40 <221> NAME/KEY: PEPTIDE
 41 <222> LOCATION: (1)..(2)
 42 <223> OTHER INFORMATION: Xaa at residue 1 is des-Xaa, Asn, Gln or pyro-Glu;
 43 Xaa at residue 2 is des-Xaa, Gly, Ala, Glu, gamma-
 44 carboxy-Glu, Asp, Asn, Ser, Thr, g-Asn (where g is
 45 glycosylation), g-Ser or g-Thr;
 47 <220> FEATURE:
 48 <221> NAME/KEY: PEPTIDE
 49 <222> LOCATION: (3)..(7)
 50 <223> OTHER INFORMATION: Xaa at residue 3 is Val, Ala, Gly, Leu, Ile, Ser,
 51 Thr, g-Asn, g-Ser or g-Thr; Xaa at residue is Phe,
 52 Tyr, meta-Tyr, ortho-Tyr, nor-Tyr, mono-halo-Tyr,
 53 di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr,
 55 <220> FEATURE:
 56 <221> NAME/KEY: PEPTIDE
 57 <222> LOCATION: (7)
 58 <223> OTHER INFORMATION: nitro-Tyr, Trp (D or L), neo-Trp, halo-Trp (D or
 59 L), any synthetic aromatic amino acid, an
 60 aliphatic amino acid bearing linear or branched
 61 saturated hydrocarbon chains such as Leu (D or L),
 W--> 62 Ile and

*See
 P.P. 1 and 4*

*Does Not Comply
 Corrected Diskette Needed*

*residue location
 number needs to
 be present here.*

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64 <220> FEATURE:
65 <221> NAME/KEY: PEPTIDE
66 <222> LOCATION: (7)..(8)✓
67 <223> OTHER INFORMATION: Val or non-natural derivatives of the aliphatic
68     amino acid; Xaa at residue 8 is Lys, Arg,
69     homolysine, homoarginine, ornithine, nor-Lys, His,
70     N-methyl-Lys, N,N'-dimethyl-Lys,
W--> 71     N,N',N''-trimethyl-Lys,
73 <220> FEATURE:
74 <221> NAME/KEY: PEPTIDE
75 <222> LOCATION: (8)..(9)✓
76 <223> OTHER INFORMATION: any synthetic basic amino acid, Ser, Thr, g-Ser,
77     g-Thr or any hydroxylated synthetic residue; Xaa
78     at residue 9 is an aliphatic amino acids bearing
79     linear or branched saturated hydrocarbon chains
W--> 80     such
82 <220> FEATURE:
83 <221> NAME/KEY: PEPTIDE
84 <222> LOCATION: (9)✓
85 <223> OTHER INFORMATION: as Leu (D or L), Ile and Val or non-natural
86     derivatives of the aliphatic amino acid, Met, Phe,
87     Tyr, meta-Tyr, ortho-Tyr, nor-Tyr, mono-halo-Tyr,
88     di-halo-Tyr, O-sulpho-Tyr, O-phospho-Tyr,
W--> 89     nitro-Tyr,
91 <220> FEATURE:
92 <221> NAME/KEY: PEPTIDE
93 <222> LOCATION: (9)..(11)✓
94 <223> OTHER INFORMATION: Trp (D or L), neo-Trp, halo-Trp (D or L) or any
95     synthetic aromatic amino acid; Xaa at residue 11
96     is His, Ser, Thr, g-Ser, g-Thr, an aliphatic amino
97     acid bearing linear or branched saturated
99 <220> FEATURE:
100 <221> NAME/KEY: NP_BIND
101 <222> LOCATION: (11)✓
102 <223> OTHER INFORMATION: hydrocarbon chains such as Leu (D or L), Ile and
103     Val, non-natural derivatives of the aliphatic
104     amino acid, Phe, Tyr, meta-Tyr, ortho-Tyr,
105     nor-Tyr, mono-halo-Tyr, di-halo-Tyr, O-sulpho-Tyr,
107 <220> FEATURE:
108 <221> NAME/KEY: PEPTIDE
109 <222> LOCATION: (11)..(14)✓
110 <223> OTHER INFORMATION: O-phospho-Tyr, nitro-Tyr, Trp (D or L), neo-Trp,
111     halo-Trp (D or L) or a synthetic aromatic amino
112     acid; Xaa at residue 12 is Pro, hydroxy- Pro (Hyp)
113     or g-Hyp; Xaa at residue 14 is des-Xaa, Gly, Ala,
115 <220> FEATURE:
116 <221> NAME/KEY: PEPTIDE
117 <222> LOCATION: (14)✓
118 <223> OTHER INFORMATION: Lys, Arg, homolysine, homoarginine, ornithine,

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245 <213> ORGANISM: Conus pennaceus
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248 <221> NAME/KEY: PEPTIDE
249 <222> LOCATION: (7)..(11)
250 <223> OTHER INFORMATION: Xaa at residue 7 is Lys, N-methy-Lys,
251 N,N-dimethyl-Lys or N,N,N-trimethyl-Lys; Xaa at
252 residue 11 is Pro or hydroxy-Pro (Hyp)
254 <400> SEQUENCE: 7
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256 1 5 10
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260 <211> LENGTH: 25
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262 <213> ORGANISM: Conus marmoreus
264 <220> FEATURE:
265 <221> NAME/KEY: modified_base
266 <222> LOCATION: (14)
267 <223> OTHER INFORMATION: i
269 <400> SEQUENCE: 8
W--> 270 caggatccaa yggngtbtgy tgygg 25
273 <210> SEQ ID NO: 9
274 <211> LENGTH: 28
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276 <213> ORGANISM: Conus marmoreus
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280 <222> LOCATION: (26)
281 <223> OTHER INFORMATION: i
283 <400> SEQUENCE: 9
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287 <210> SEQ ID NO: 10
288 <211> LENGTH: 23
289 <212> TYPE: DNA
290 <213> ORGANISM: Artificial Sequence
292 <220> FEATURE:
293 <223> OTHER INFORMATION: Description of Artificial Sequence:universal
294 primer
296 <400> SEQUENCE: 10
297 aagctcgagt aacaacgcag agt 23
300 <210> SEQ ID NO: 11
301 <211> LENGTH: 805
302 <212> TYPE: DNA
303 <213> ORGANISM: Conus marmoreus
305 <220> FEATURE:
306 <221> NAME/KEY: CDS
307 <222> LOCATION: (82)..(264)
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310 ggcgaataca cctggcaggt actcaacgaa cttcaggaca cattcttttc acctggacac 60
312 tqgaactga caacaggcag a atg cgc tgt ctc cca gtc ttg atc att ctt 111

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VERIFICATION SUMMARY DATE: 06/08/2000
PATENT APPLICATION: US/09/580,201 TIME: 13:50:12

Input Set : A:\2314-187.app
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L:271 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:62 M:259 W: Field exceeds allowed number of lines, <223> Other Information:
L:71 M:259 W: Field exceeds allowed number of lines, <223> Other Information:
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L:255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
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